SDM INITIATION DOCUMENTS

- Cost Benefit Analysis
- Feasibility Study
- Initial Risk Assessment
- Needs Statement
- Project Plan (Future Item)

For Comments Send E-mail to the SEO & PMD mailbox

Return to Title Page

COST/BENEFIT ANALYSIS

Project or System Name

U.S. Department of Housing and Urban Development

Month Year (e.g., January 2000)

Return to Title Page

TABLE OF CONTENTS

Return to Title Page

TABLE OF CONTENTS (concluded)

CHAPTER 1. GENERAL INFORMATION

The Cost/Benefit Analysis provides adequate cost and benefit information, including the impact of security, privacy, and internal control requirements to analyze and evaluate alternative approaches to meeting mission deficiencies.

1.1 Summary

Identify the existing system, if any, and all alternatives proposed for cost/benefit analysis. Summarize the system requirements.

1.2 Environment

Identify:

- Project sponsor, developer, user, and computer center or network where the software will be implemented;
- System input, output, processing and security/privacy requirements; and
- The interaction with other systems or organizations.

1.3 References

List applicable references, such as:

- Project request or authorization;
- Feasibility Study document or other previously published documents;
- Documentation concerning related projects;
- Federal regulations and other reference document; and
- Source of information for decision criteria, operational performance requirements, and estimation parameters used in the analysis.

CHAPTER 2. MANAGEMENT SUMMARY

2.1 Scope

State the purpose of the cost/benefit analysis, the alternatives for development and operations, and major elements of cost.

2.2 Performance Characteristics

State the operational requirements, system life, and workload for which the cost/benefit analysis was conducted.

2.3 Assumptions and Constraints

State the assumptions and constraints under which the cost/benefit analysis was conducted.

2.4 Methodology

Summarize the procedures for conducting the cost/benefit analysis and the techniques used in estimating and computing costs. These techniques may be detailed in an appendix.

2.5 Evaluation Criteria

State criteria for evaluating alternatives, such as organizational objectives, operational efficiency, and reduced operating costs.

2.6 Recommendations

Summarize the recommendations for development and operation of the system.

Return to Title Page

CHAPTER 3. DESCRIPTION OF ALTERNATIVES

3.1 Current System

Describe the technical and operational characteristics of the current system

3.2 Proposed System

Describe the technical and operational characteristics of the proposed system

3.3 Alternative System 1

Describe the technical and operational characteristics of the first alternative system. *(repeat for each alternative until the last)*

3.4 Alternative System *n*

Describe the technical and operational characteristics of the last alternative system.

Return to Title Page

CHAPTER 4. COSTS

4.1 Non-Recurring Costs

Present non-recurring costs of each alternative over the system life.

4.1.1 Capital Investment Costs

Include costs for acquiring, developing and installing:

- Site and Facility;
- Automated data processing (ADP) equipment;
- Data communication equipment;
- Environmental conditioning equipment;
- Security and privacy equipment;
- ADP operations, multipurpose and applications software; and
- Database.

4.1.2 Other Non-Recurring Costs

Include costs for:

- Studies (requirement and design studies);
- Procurement planning and benchmarking;
- Database preparation;
- Software conversion;
- Reviews and other technical and management overhead;
- Training, travel and other personnel-related costs of development and installation (except salaries and fringe benefits);
- Involuntary retirement, severance and relocation costs for personnel;
- Contractual, interagency or other direct support services; and
- Incremental or additional overhead costs.

4.2 Recurring Costs

Present the monthly and/or quarterly recurring costs of operating and maintaining each alternative over the system life, including:

- Equipment lease, rental and in-house maintenance;
- Software lease, rental and in-house maintenance;
- Data communications lease, rental and in-house maintenance;
- Personnel salaries and fringe benefits;
- Direct support services (intra-agency services);
- Travel and training;
- Space occupancy;
- Supplies and utilities;
- Security and privacy;
- Contractual and interagency services, (e.g., ADP services, data communications, software, technical and other support) and
- Overhead. Include overhead expenses that represent additional or incremental expenses attributable to the alternative.

Return to Title Page

CHAPTER 5. BENEFITS

5.1 Non-Recurring Benefits

Describe benefits that can be assigned dollar values. Describe benefits in terms of data processing, user, administrative, and support categories.

5.1.1 Cost Reduction

Include cost reductions resulting from improved system operations, such as: reduction of resource requirements; improved operating efficiency; improved data entry, storage, and retrieval techniques; system performance monitoring; software conversion and optimization; data compression techniques; and centralized/decentralized processing.

5.1.2 Value Enhancement

Include benefits that enhance the value of an application system, such as: improved resources utilization; improved administrative and operational effectiveness; and reduced error rates.

5.1.3 Other

For example, offsetting receipts. Include the value of excess equipment.

5.2 Recurring Benefits

Present the monthly and/or quarterly recurring benefits of operating and maintaining the alternative over the system life, including:

- Equipment lease, rentals and in-house maintenance;
- Software lease, rental and in-house maintenance;
- Data communications lease, rental and in-house maintenance;
- Personnel salaries and fringe benefits;
- Direct support services (intra-agency services);
- Travel and training;
- Space occupancy;
- Supplies and utilities;
- Security and privacy;
- Contractual and interagency services, such as: information systems (IS) services, data communications, software, technical and other support;

- Overhead. Include overhead benefits that represent additional or incremental expenses attributable to the alternative.
- Cost avoidance. Describe avoidance of future costs that would be incurred if the best alternative were chosen from a set of alternatives, compared to maintaining current operations. Describe improvements in operational flexibility, information handling and response to anticipated requirements, as related to cost avoidance.

5.3 Non-Quantifiable Benefits

Describe benefits that cannot be quantified in terms of direct dollar values (e.g., improved service; reduced risk of incorrect processing, improved information handling; enhanced organizational image). Intangible benefits can sometimes be assigned values in terms of estimates and tradeoffs. When applicable, include:

- Boundary estimates (i.e., analysis of best case and worst-case estimates to justify the proposed alternative).
- Tradeoffs with tangible benefits (i.e., cases where an intangible benefit is gained at the expense of reduced potential tangible benefits).

CHAPTER 6. COMPARATIVE COST/BENEFIT SUMMARY

Present the elements below in a manner to facilitate comparison. Provide supporting documentation as required for validation and management review.

6.1 Cost of Each Alternative over the System Life

For each alternative, present costs in the period (year, quarter, month) in which they will be incurred.

6.1.1 Non-Recurring Costs

Include non-recurring costs (capital and other), such as studies, personnel training, site/facility modifications, supplies and security procedures. Total the non-recurring costs.

6.1.2 Recurring Costs

Include recurring costs such as rental, maintenance, utilities, telecommunications and personnel. Total the recurring costs.

6.1.3 Total Cost

Total the non-recurring and recurring costs subtotals for each year of the system life.

6.1.4 System Life Costs

Calculate the total cost over system life by summing the total costs over the period of the system life.

6.1.5 Present Value Cost

Calculate present value cost over the entire system life using authorized present value factors. Calculations are to be based on discounting methods as set forth in Office of Management and Budget (OMB) Circular A-94.

6.1.6 Residual Value Estimate

Calculate the remaining economic value of ownership of all IS resources as of the last month of the system life, as established by Federal guidelines. Make the present value calculation to get the discounted residual value.

6.1.7 Adjusted Cost

Calculate the adjusted cost by subtracting the discounted residual value from the total present value cost.

6.2 Benefits

Identify the period of benefits. Enter the quantifiable dollar benefits for the period in which they are accrued, and make present value calculations.

6.3 Net Present Value

Calculate the net present value by subtracting the adjusted cost from the total present value of benefits.

6.4 Benefit/Cost Ratio

Calculate the benefit/cost ratio by dividing the total present value of benefits by the adjusted cost.

6.5 Payback Period

Calculate the year or month in which the sum of benefits first exceeds the sum of the costs expressed in current dollars.

CHAPTER 7. SENSITIVITY ANALYSIS

7.1 Methodology

Describe the approach, assumptions, and the model used for conducting the sensitivity analysis. Describe, including examples where appropriate, the analysis of factors (identified below) determined to warrant sensitivity analysis.

7.1.1 Length of System Life

Consider the effects of a shorter or longer system life.

7.1.2 Volume, Mix, or Pattern of Workload

Consider the effects of variation in the estimated volume, mix, or pattern of workload.

7.1.3 Requirements

Consider the effects of potential changes in requirements resulting from either legislative mandate or changes in functional or organizational structure.

7.1.4 Configuration of Equipment or Software

Consider the effects of changes in configuration of hardware, software, data communications and other facilities.

7.1.5 Assumptions

Consider the effects of alternative assumptions concerning objective, requirements and operations. Consider the effects of alternative assumptions concerning: inflation rate; residual value of equipment, facilities, and software; and length of the development projects (e.g., effects of delay in completion).

7.2 Sources of Data

Identify the sources of data for the sensitivity analysis. Identify the method used for data collection and the quality of data.

7.3 Other Factors

Identify other factors that may qualitatively or quantitatively affect the assessment of costs and benefits for one or more of the alternatives, but that are not amenable to sensitivity analysis of their implications.

7.4 Results

Identify and display in convenient fashion the results of the sensitivity analysis for all alternatives and factors.

7.5 Evaluation and Conclusion

Present the key points of the sensitivity analysis, evaluate its validity and implications, and present the conclusion.

Return to Title Page

FEASIBILITY STUDY

Project or System Name

U.S. Department of Housing and Urban Development

Month Year (e.g., January 2000)

Return to Title Page

TABLE OF CONTENTS

TABLE OF CONTENTS (concluded)

Return to Title Page

CHAPTER 1. GENERAL INFORMATION

The Feasibility Study is used to provide a detailed analysis of the objectives, requirements, and system concepts of the proposed system, including justification, schedule, and end products.

1.1 Summary

Summarize the general nature of the proposed system, including justification, schedule, and end products.

1.2 Environment

Identify:

- The project sponsor, developer, user, and computer center or network in which the software will be implemented;
- The system input, output, processing and security requirements, if known;
- The interaction with other systems or organizations; and
- For major modifications to existing systems, include the scope and physical environment (batch processing environment, interactive online transactions, ad hoc reports, external and local communications).

1.3 References

List applicable references, such as:

- The project request (authorization);
- Previously published documents on the subject; and
- Documentation concerning related projects.

Return to Title Page

CHAPTER 2. MANAGEMENT SUMMARY

2.1 Requirements

State the requirements of the proposed system, such as:

- New services;
- Increased capacity;
- Legislative and policy requirements;
- Privacy and security;
- Audit controls; and
- Target/completion date.

2.2 Objectives

State the major performance objectives of the proposed system, such as:

- Reduced staff and equipment costs;
- Increased processing speed;
- Increased productivity;
- Improved management information services;
- Improved controls over automated decision making system; and
- Compliance with regulations.

2.3 Assumptions and Constraints

Present the assumptions and constraints of this study, such as:

- Operational life of the proposed system;
- Period of time for comparison of system alternatives;
- Interaction of the proposed system with other systems and organizations;
- Input, output, and processing requirements;
- Financial constraints;
- Legislative and policy constraints;
- Changing hardware, software, and operating environment; and
- Availability of information and resources.

2.4 Methodology

Identify the way in which this study was performed and how the proposed system was evaluated. Summarize the general method or strategy employed (e.g., survey, weighting, modeling, benchmarking, simulation).

2.5 Evaluation Criteria

Identify the criteria employed in arriving at the recommendations summarized in Section 2.6, *Recommendation*, (e.g., cost, priority, development time, ease of use).

2.6 Recommendation

State the recommendation for the proposed system, including consequences of not taking action, and what delays can be tolerated.

2.7 Risks

Summarize the associated risks and recommended solutions.

Return to Title Page

CHAPTER 3. SYSTEM REQUIREMENTS AND OBJECTIVES

3.1 Requirements

Describe the general requirements of the proposed system.

3.2 Output

For existing systems, describe system output (e.g., reports, documents, data). For each output, include characteristics such as use, frequency of production, interfaces, and distribution. If any of this information can be estimated for proposed systems, include as much output information as possible.

3.3 Input

For existing systems, describe system input including source of data, type, volume, organization of data, and frequency of submission. If any of this information can be estimated for proposed systems, include as much input information as possible.

3.4 File Description

For existing systems, describe the contents, purpose, use and update frequency of each file or database. If any of this information can be estimated for proposed systems, include as much file information as possible.

3.5 Validation

Describe any validation criteria. For new systems, validation criteria may be discussed in general terms. They may be addressed specifically, if known at this time.

3.6 Processing/Data Flow

For existing systems, describe the major processing flow or data flow, showing enhancements or modifications where applicable. The flow should be presented in graphic form (flowchart or block diagram) supplemented by narrative. For new systems, a general, high-level graphic, accompanied by narrative, may be sufficient.

3.7 Security, Privacy, and Control

State the detailed requirements for security, privacy, and control, specifically for new systems, and/or existing systems and their enhancements or modifications. This information is typically provided by the automated data processing (ADP) Security Office and the system developer. The appropriate security level should be referenced here, specifically for existing systems and their enhancements. For new systems, the appropriate security level should be researched and documented thoroughly to assure security and privacy compliance. An evaluation should be performed to ascertain the applicability of the Privacy Act. If personal information is being collected, the Departmental Privacy Act Officer or the Privacy System Manager should be contacted to obtain further guidance on the privacy requirements.

3.8 Information Storage and Retrieval

Specify any information storage and retrieval requirements for existing systems. An estimate is acceptable for new applications, unless specifics are known at this time.

3.9 Interface

Identify any systems with which the proposed new or modified system must interface.

Return to Title Page

CHAPTER 4. ANALYSIS OF EXISTING SYSTEM OR CURRENT FUNCTIONAL PROCEDURES

4.1 Processing/Data Flow

Describe the major processing/data flow of the existing system. The flow should be presented in graphic form, supplemented by narrative. This step should be included for both automated systems and manual procedures.

4.2 Workload

Specify the volume of work processed by the existing system. This step should be included for both automated systems and manual procedures.

4.3 Costs

Itemize costs incurred in operating the existing system (e.g., staff, equipment, space, support services, materials, overhead). Details of costs are presented in a Cost/Benefit Analysis document.

4.4 Personnel

Identify skill categories and number of persons required to operate or maintain the existing system, whether an automated system or manual procedure.

4.5 Equipment

Itemize any equipment used by the existing system, whether automated or manual.

4.6 Limitations

Identify any limitations of the existing system (e.g., inadequate to untimely information, delay in getting data to the user, resource constraints, organization and policy issues).

4.7 Special Considerations

Identify any other factors unique to this system or manual procedures.

CHAPTER 5. PROPOSED SYSTEM

5.1 Description of Proposed System

Present the overall system concept and describe how the requirements will be met. If software tools or methodologies associated with software engineering are used, describe them in the context of the overall requirements.

5.2 Improvements

Describe the improvements of the system in terms of the objectives stated in Section 2.2, *Objectives*.

5.3 Impacts

Describe the anticipated impacts of the proposed system, including potential conversion problems.

5.3.1 Equipment Impacts

Describe new equipment requirements and changes to currently available equipment.

5.3.2 Software Impacts

Describe any additions or modifications to existing applications and support software in order to adapt them to the proposed system.

5.3.3 Organizational Impacts

Describe any organizational, personnel, and skill requirement changes.

5.3.4 Operational Impacts

Describe the effects on operations, such as:

- User operating procedures;
- Operating center procedures;
- Operating center/user relationships;
- Source data processing;
- Data entry procedures;

- Data retention requirements, information storage and retrieval procedures (refer to Handbook 2229.1, Records Disposition Scheduling for Automated Systems);
- Output reporting procedures, media, and schedules; and
- System failure contingencies and recovery procedures.

5.3.5 Developmental Impacts

Describe the developmental impacts, such as:

- Specific activities to be performed by the user in support of development of the system;
- Resources required to develop databases;
- Computer processing resources required to develop and test the new system; and
- Privacy and security implications.

5.3.6 Site or Facility Impacts

Describe building or office modification requirements.

5.3.7 Cost Impacts

Describe cost factors that may influence the development, design, and continued operation of the proposed system.

Return to Title Page

CHAPTER 6. ALTERNATIVE SYSTEMS

6.1 Alternative System 1.

Describe the first alternative system, following the outline described for the proposed system (Section 5). State the reasons that the alternative system was not selected. *(repeat for each alternative; until the last)*

6.2 Alternative System *n*.

Describe the last alternative system, following the outline described in Section 5. State the reasons for non-selection.

Return to Title Page

CHAPTER 7. RATIONALE FOR RECOMMENDATIONS

State the reasoning which supports the recommendation of the proposed system (presented in Chapter 5) over the alternative systems (presented in Chapter 6). Include all quantifiable and non-quantifiable benefits, required resources, possible effects of delay, and consequences of not taking action.

CHAPTER 8. PROPOSED SCHEDULE

Outline a schedule to include analysis (i.e., functional and systems), system design, programming, program test, conversion, training, and implementation using generally accepted System Development Life Cycle (SDLC) methodology. Identify major milestones and management decision points. The milestones and deliverables for each phase are identified in HUD's System Development Methodology (SDM) Documentation Standards Manual, Appendix 1, *Application of the Model Framework to HUD's System Documentation*.

Return to Title Page

RISK ANALYSIS

Project or System Name

U.S. Department of Housing and Urban Development

Month Year (e.g., January 2000)

Return to Title Page

TABLE OF CONTENTS

Return to Title Page

TABLE OF CONTENTS (concluded)

Page #

CHAPTER 1. PROJECT AND SYSTEM DESCRIPTION

This Risk Analysis document provides an approach for conducting risk assessments of implemented systems, systems under development, microcomputer systems, implemented applications, and applications under development. The approach is adaptable for conducting the different types of risk assessments, whether it is for a personal computer (PC), large system or application, or whether it is for a system or application that is implemented or under development. It allows an informal review or short-form risk assessment to be conducted when it is determined that the system or application being assessed is or will be a microcomputer-based system.

1.1 Summary

Provide basic information about the project and the application system for which a risk analysis is being conducted. Identify the project resources: the automated data processing (ADP) platform (multi-function workstation, mainframe, local area network (LAN), wide area network (WAN), open/closed network) on which the application runs is defined; and a configuration diagram of the system's connections and interfaces and/or a diagram of the application's data flow is provided. This will help determine the type of hardware environment in which the application operates, the functional nature and primary use of the software, and whether the application system affects other program offices and/or receives or disburses funds. Provide the system name and system identification number.

1.2 Project Resource Definition

1.2.1 Project Management Structure

Identify the project sponsor, sponsoring office project leader, and the estimated or actual start and end dates of a new or modified system project.

1.2.2 Project Staffing

Determine the approximate number of staff hours required (HUD personnel and contractors) and identify the expertise, knowledge, skills, and abilities needed by the project team to develop and/or maintain a quality application system. Staff hours should be broken down by major skill category, both technical and program related. This information will help management determine the resources required and when they are needed.

1.2.3 Project Funding

Estimate the project cost, funds available and funds committed to complete and/or maintain the project. Ensure that adequate funds have been committed for each phase of the project.

1.3 Application System Description, Characteristics, Connectivity, Certification

Application System Name/No**.:** Provide the system name and system identification number.

1.3.1 Application System Description

Indicate type of system, whether new, modification, or existing, for which the risk analysis is being conducted.

1.3.2 System Characteristics

Indicate the estimated number of headquarters and field offices that are or will be using the application system.

1.3.3 System Connectivity

Determine the type of connection(s) the application system has, (e.g., Multi-function workstation, mainframe, LAN, WAN, open/closed network, any application system to system interfaces).

1.3.4 Certification

Indicate if and when an ADP platform certification has been conducted. A copy of the certification should be attached to the management report. If no certification has been performed, contact the ADP Security Office to schedule an ADP platform certification.

1.4 Application System Flow Diagram

Application System Name/No.: Provide the system name and system identification number.

This diagram should show any interface(s) of the application system with other program areas.

CHAPTER 2. APPLICATION SYSTEM SOFTWARE, DATA CHARACTERISTICS, AND REPLACEMENT COST

2.1 Summary

Provide a detailed definition of the application system. This involves identifying all the software used by the application system, storage media, backups, and replacement cost. The sensitivity and criticality of the application software and data is analyzed.

2.2 Software Inventory and Cost

Develop an accurate and up-to-date list of the software (programs) used by the application system, identify the type of storage media the system uses, assess back-up for the system, estimate the number of hours necessary for development and develop a rough estimate of the cost of replacing the software.

2.3 Data Inventory and Cost

Develop an accurate and up-to-date list of the data used by the application system, assess back-up for the system, estimate the number of hours necessary for replacement, and estimate of the cost of replacing the data.

2.3.1 Total Replacement Cost

Enter the total replacement cost for all of the data with a cost estimate for replacement.

2.4 Software Criticality

Identifies whether the application processes information that is critical to the users and to the accomplishment of HUD's mission.

2.4.1 Overall Criticality and Impact

Determine the overall criticality of the software and impact.

2.5 Data Criticality and Sensitivity

Describes the criticality and sensitivity of the data the application system uses and processes.

CHAPTER 3. BASELINE MANAGEMENT CONTROL REQUIREMENTS

3.1 Summary

Discuss whether the application's software and data meet the minimum baseline management control requirements (BLMCRs) set forth in all HUD directives and agency regulations.

3.2 BLMCRs

3.2.1 Personnel

Identify personnel BLMCRs.

3.2.2 Information

Identify information BLMCRs.

3.2.3 Computer

Identify computer BLMCRs.

3.2.4 Procedural and Administrative

Identify procedural and administrative BLMCRs.

Return to Title Page

CHAPTER 4. THREATS AND VULNERABILITIES THAT MAY AFFECT THE NORMAL OPERATION OF THE APPLICATION SYSTEM

4.1 Summary

Review the threats that might affect the application system and review the operating procedures for vulnerabilities that could be exploited, and thus cause a negative impact on the operation of the application system.

4.2 Threats and Vulnerabilities

4.2.1 Natural Threats

Identify and discuss natural threats.

4.2.2 Intentional Human Threats

Identify and discuss intentional human threats, both insider and outsider.

4.2.3 Unintentional Human Threats

Identify and discuss unintentional human threats, both insider and outsider.

4.2.4 Environmental Threats

Identify and discuss environmental threats.

4.3 Impact Areas

4.3.1 Denial of Service

Discuss the state that exists when computer services cannot be performed or made available within an acceptable period of time.

4.3.2 Destruction

Discuss the state that exists when any asset, unintentionally or intentionally, is declared irreparable and irrecoverable due to threat induced destruction.

4.3.3 Disclosure

Discuss the state that exists when unauthorized access to an asset occurs, causing information or data to be accessed by or released to someone without a clearance or a need-to-know.

4.3.4 Damage

Discuss the state that exists when any asset, unintentionally or intentionally, suffers damage as a consequence of the threat, making the asset unusable until repairs/fixes can be made. Damage includes alteration and modification of data.

4.4 BLMCRs

4.4.1 Personnel

Identify personnel BLMCRs.

4.4.2 Information

Identify information BLMCRs.

4.4.3 Computer

Identify computer BLMCRs.

4.4.4 Procedural and Administrative

Identify procedural and administrative BLMCRs.

Return to Title Page

CHAPTER 5. CURRENT RISK PROFILE OR MANAGEMENT CONTROL TECHNIQUES

5.1 Summary

Determines whether management control techniques are needed, review available management control techniques in various management control categories, and identify which ones are appropriate for minimizing the impact of the threats identified. A control objective is established for new, modified, or existing application systems to define the management control measures that must be implemented to meet an acceptable level of risk for the application system. This process should result in a recommendation to accept the current risk profile or to adopt specific management control techniques.

5.2 Management Control Techniques Identification and Risk Profile Acceptance

5.2.1 Personnel

Identify personnel baseline management control requirements (BLMCRs).

5.2.2 Information

Identify information BLMCRs.

5.2.3 Computer

Identify computer BLMCRs.

5.2.4 Procedural and Administrative

Identify procedural and administrative BLMCRs.

Return to Title Page

CHAPTER 6. MANAGEMENT CONTROL TECHNIQUES

6.1 Summary

To implement and maintain management control techniques do the following:

- Detail planned actions for implementation of management control techniques.
- Prepare schedule for planned actions.
- Test and implement management control techniques.
- Develop system specific routine maintenance procedures for management control techniques.

It is the responsibility of the program office to ensure that approved control techniques are properly implemented and maintained. Planned actions should be specific and brief. The Schedule of Planned Actions should be prepared by the program office project manager and reviewed by the MCC's Comptroller or Coordinator.

Return to Title Page

CHAPTER 7. MANAGEMENT REPORT AND MANAGEMENT APPROVAL OF PROPOSED MANAGEMENT CONTROL TECHNIQUES

7.1 Summary

Provide a completed certification form with signatures to indicate completion of the risk analysis. This report confirms that the program office, through the Management Control Committee's (MCC) Comptroller or Coordinator, certifies that:

- Risks associated with the application system have been identified;
- Adequate controls are in place or are planned for those risks under its responsibility; and
- The documentation necessary to support the report is adequate to justify the conclusions reached in the analysis and the documentation is retained in the program office.

Return to Title Page

CHAPTER 8. REVIEWS/AUDITS OF THE APPLICATION SYSTEM'S CONTROLS

8.1 Summary

Provide a schedule of planned actions for use in periodically reviewing and auditing the automated application system's controls.

Return to Title Page

NEEDS STATEMENT

Project or System Name

U.S. Department of Housing and Urban Development

Month Year (e.g., January 2000)

Return to Title Page

TABLE OF CONTENTS

Page #

Return to Title Page

CHAPTER 1. GENERAL INFORMATION

1.1 Purpose

The purpose of the Needs Statement is to describe a need, justify the exploration of alternative solutions, and identify estimated costs associated with these actions to the Systems Engineering, Oversight and Performance Management Division (SEO&PMD) Director.

1.2 Functional Statement

Identify the functional area described in the Needs Statement. (A need may be common to more than one functional area or office. If so, identify those functional areas.) If possible, cite specific directives or instructions that define the functions to be supported.

Describe briefly the current organizational and functional environment.

1.3 Needs

Describe the scope and nature of the deficiency. Avoid describing the specific characteristics or capabilities of hardware or software other than to state that the current environment or automated support does not adequately support the function.

Summarize the needs in terms of the job to be done and the results or outcome to be achieved. Describe the benefits to be expected. Remember that while the Needs Statement describes a deficiency or needs, it does not suggest a solution.

1.4 Existing and Planned Capabilities

Describe existing or currently planned capabilities to perform this function.

1.5 Assessment of Need

Evaluate the ability of current and planned capabilities to accomplish the function. Base the evaluation on one or more of the following factors:

- A deficiency in existing capabilities, (e.g., excessive labor intensity, lack of adequate controls, untimely report data, inability to adequately perform the function).
- The obsolescence of equipment or software.
- The vulnerability of existing systems.

- The isolation of the existing system from other parts of the automation or data communications network.
- The development of new programs.

1.6 Constraints

Identify conditions that constrain accomplishment of functional needs, such as:

- Timeliness.
- Relative priority within the functional areas.
- Limits on investment or recurring costs that will be placed on the alternative solutions.
- Policy or organizational constraints placed on the identification and selection of alternatives to be considered.
- Inter-agency, intra-agency, federal, international standardization and/or inter-operability requirements.
- Potentially critical interdependencies or interfaces with other systems, new technology or development programs.
- Logistics and staffing considerations.
- Security and survivability or physical disaster considerations.

1.7 Estimated Costs

1.7.1 Total Estimated Cost

Estimate the range of costs required to develop and implement the system. (This estimate is understood to be preliminary, based on the user's best estimation of time, staff, equipment, and communications resources. It is intended to determine probable approval and funding levels and to assist in obtaining funding support).

1.7.2 Define System Costs

State the events, tasks, and estimated resources required to complete the Define System phase.

1.8 Reassessment

It is important to keep in mind that the nature of the Needs Statement may be altered as the project progresses. If, in a later development phase the original purpose or intent of the Needs Statement which was the basis for initiating the project is altered, or the direction changed, the validity of the Needs Statement must be reassessed. If changes in the project scope are significant, re-entering the life cycle process at the Approve Project phase must be considered. In any event, all changes must be approved by the project sponsor, in addition to the rectification of intent to maintain funding.